

CLAIMS

What is claimed is:

1. A method of managing connections to a communications network, said
 5 method comprising the steps of:
 - a) detecting the presence of an interface connection to a communications
 line;
 - b) initializing said interface connection to said communications line for a
 first signaling protocol;
 - 10 c) checking whether said interface connection has initialized successfully;
 and, if said check indicates that said interface connection has not initialized
 successfully,
 - d) initializing said interface connection for a second signaling protocol.
- 15 2. A method as in claim 1 wherein, if in the checking step (c), said interface
 connection has initialized successfully, said interface connection provides
 communications over said communications line using said first signaling protocol.
- 20 3. A method as in claim 1 after initializing step (d), said method further
 comprising the steps of:
 - e) checking whether said interface connection has initialized successfully
 to said second signaling protocol; and, if said check indicates that said interface
 connection has initialized successfully,
 - 25 f) providing communications over said communications line using said
 second signaling protocol.
- 30 4. A method as in claim 3 wherein, if in the checking step (c), said interface
 connection has initialized successfully, said interface connection provides
 communications over said communications line using said first signaling protocol.
5. A method as in claim 3 wherein, if in the checking step (e), said interface
 connection has not initialized successfully, said interface connection returns an error
 message to said communications system.
- 35 6. A method as in claim 1 wherein, said interface connection is a T1 interface.

7. A method as in claim 1 wherein said first signaling protocol is common channel signaling (CCS) and said second signaling protocol is channel associated signaling (CAS).

8. A method as in claim 7 wherein, the initializing step (b) comprises:

- i) downloading CCS interface parameters from a communications server;
- ii) waiting for an interface ready signal; and
- iii) initiating layer 2 negotiations, an indication of successful layer 2 negotiations indicating successful CCS initialization.

9. A method as in claim 7 wherein, the initializing step (d) comprises:

- i) downloading CAS interface parameters from a communications server;
- ii) waiting for an interface ready signal; and
- iii) initiating a CAS interface, an indication of a valid CAS interface indicating successful CAS initialization.

10. A communications network connected to a plurality of communications lines, said communications network comprising:

means for detecting the presence of an interface connection to a communications line;

interface connection initialization means for initializing said interface connection to a signaling protocol, said interface connection initialization means initializing said interface connection to a first signaling protocol upon detection of the presence of said interface connection; and

checking means for checking whether said interface connection has initialized successfully, if said checking means determines that said interface connection has initialized to said first signaling protocol successfully, said interface connection provides communications over said communications line using said first signaling protocol, otherwise, said initialization means initializing said interface connection for a second signaling protocol.

11. A communications network as in claim 10, wherein after said initialization means initializes said interface connection for said second signaling protocol, said checking means checks whether said interface connection has initialized successfully to said second signaling protocol and, if said check indicates that said interface connection has initialized successfully, said communications interface provides communications over said communications line using said second signaling protocol.

12. A communications network as in claim 11 wherein if after said initialization means initializes said interface connection for said second signaling protocol, said check indicates that said interface connection has not initialized successfully, an error message is returned.

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13. A communications network as in claim 10 wherein first signaling protocol is common channel signaling (CCS) and said second signaling protocol is channel associated signaling (CAS).

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14. A communications network as in claim 13 wherein, the initializing means comprises:

downloading means for downloading interface parameters from a communications server;

means for waiting for an interface ready signal; and

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signaling negotiation means for negotiating physical layer and data link layer setup.

15. A method of automatically configuring channel interfaces in a communications network, said method comprising the steps of:

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a) detecting the presence of a channel interface connected to a communications line;

b) initializing said channel interface for a first signaling protocol;

c) checking whether said channel interface has initialized successfully

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and if said channel interface has initialized successfully, providing communications over said communications line using said first signaling protocol; otherwise,

d) initializing said interface connection for a second signaling protocol;

e) checking whether said interface connection has initialized successfully to said second signaling protocol; and, if said check indicates that said interface connection has initialized successfully,

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f) providing communications over said communications line using said second signaling protocol.

16. A method as in claim 15 wherein, if in the checking step (e), said channel interface has not initialized successfully, an error message is returned to said communications system.

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17. A method as in claim 15 wherein, said channel interface is a T1 interface.

18. A method as in claim 15 wherein said first signaling protocol is common channel signaling (CCS) and said second signaling protocol is channel associated signaling (CAS).

- 5 19. A method as in claim 18 wherein, the initializing step (b) comprises:
- i) downloading CCS interface parameters from a communications server;
 - ii) waiting for an interface ready signal; and
 - iii) initiating layer 2 negotiations, an indication of successful layer 2 negotiations indicating successful CCS initialization.

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20. A method as in claim 18 wherein, the initializing step (d) comprises:
- i) downloading CAS interface parameters from a communications server;
 - ii) waiting for an interface ready signal; and
 - iii) initiating a CAS interface, an indication of a valid CAS interface
- 15 indicating successful CAS initialization.

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